



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,709	12/06/2006	Heiner Kudrus	KUDRUS-2 PCT	3651
25889	7590	11/24/2009		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER SINGH, KAVEL	
			ART UNIT	PAPER NUMBER
			3651	
			MAIL DATE	DELIVERY MODE
			11/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,709

Applicant(s)

KUDRUS, HEINER

Examiner

KAVEL P. SINGH

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-23 and 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

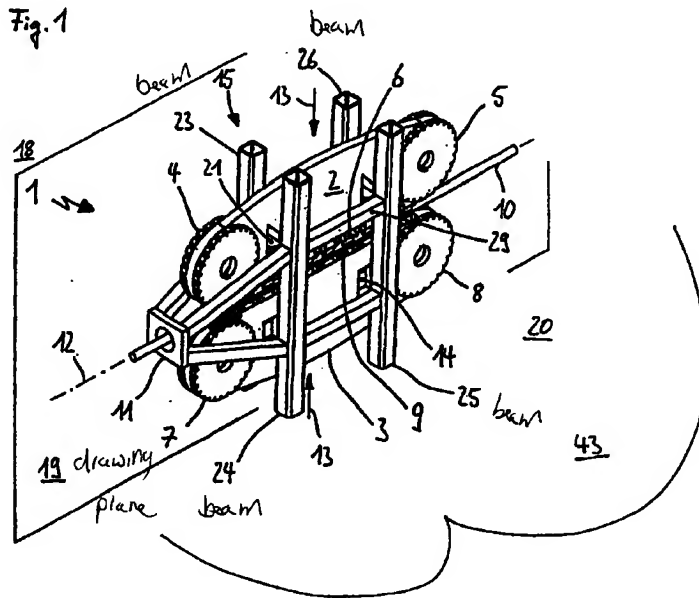
- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/14/09 have been fully considered but they are not persuasive. Applicant that Avakov does not teach a pressure cylinder rigidly coupled to a frame including a first frame half on a first side of a drawing plane and a second frame half disposed on a second side of the drawing plane. Avakov teaches a pair of endless drive chains 32 each carrying a multiplicity of gripper blocks 34 are shown on opposite sides of the coil tubing 30. The gripper blocks are pressed against the coil tubing by hydraulic cylinders 36 biasing the pressure beams 38 inwardly through trunnions 40 C4 L61-65. Avakov does not specifically teach a frame assembly, but it is known one of ordinary skill in the art that the assembly of the apparatus must be coupled to a frame for support (it is not suspended in thin air). Further, Council teaches the invention is identified by reference numeral 21. It comprises a base member 23 and 25 and four tubular frame members 31, 33, 35 and 37 which extend upward. Referring to FIG. 7, the base member 23 comprises a hollow central tube 41 and four outer tubes 43, 45, 47, and 49 connected to the central tube 41 by way of plates 51, 53, 55, and 57 C4 L18-22. It would be obvious to one of ordinary skill to incorporate the pressure cylinders of Avakov into the structure and chain system of Council in order to engage the workpiece. Applicant teaches moving the workpiece to be drawn in a drawing plane (in claims 31-34) and then argues that Avakov nor Council do not teach a drawing as defined by the drawing plane such that the first tool chain 6 and second tool chain 9 are disposed in and form the drawing plane and the drawing plane of the prior art is not in accordance

and is the plane if the paper (and is the Applicant's but shown in a diagonal view) and further there is a drawing plane for Council and Avakov that goes into the paper about the center line of the workpiece/the first and second tool chains, see side by side comparisons below

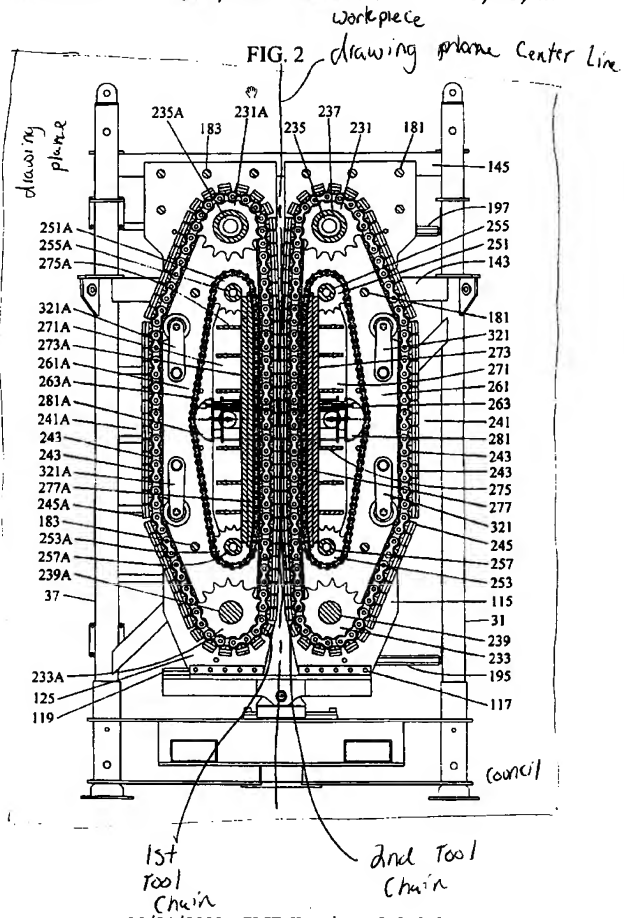


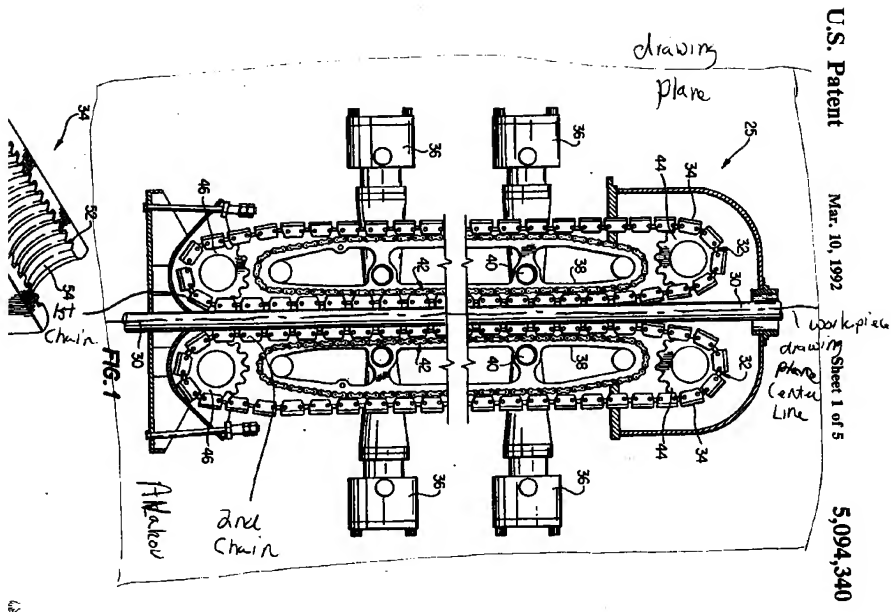
U.S. Patent

Jul. 7, 1998

Sheet 2 of 8

5,775,417





U.S. Patent

Mar. 10, 1992

Sheet 1 of 5

5,094,340

And as shown in Figure 1 of Avakov, the pressure cylinders 36 are on the same side as the drawing of the apparatus (reference number 14 of Applicant).

For the foregoing reasons, claims 3-23 and 25-34 stand rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Council U.S. Patent 5,775,417 in view of Avakov U.S. Patent No. 5,094,340.

Claims 31, 32, 33, and 34, Council teaches an apparatus and method for a caterpillar conveyor (21) comprising a first chain carrier (Fig. 2), a second chain carrier (Fig. 2), a first tool chain (243, 245P) and a second tool chain (243, 245P), wherein said first chain carrier (Fig. 2), said second chain carrier (Fig. 2), said first tool chain (243, 245P) and said second tool chain (243, 245P) are disposed in and form a drawing plane (Fig. 2) in which the workpiece to be drawn is caused to move; a frame (31, 37) supporting said caterpillar conveyor (21), wherein at least one of said first chain carrier (Fig. 2) and said second chain carrier (Fig. 2) is displaceable relative to said frame (31, 37); Avakov teaches pressure cylinder (36) rigidly coupled to said frame (38); said frame (38) comprising a first frame half disposed on a first side of the drawing plane (where 30 is) and a second frame half disposed on a second side of the drawing plane (where 30 is) Fig. 1, wherein said first frame half is substantially identical to said second frame half such that said frame (38) comprises a substantially symmetrical structure Fig. 1 with respect to the drawing plane (where 30 is); said first frame half (235a, 233a of Council) comprising a first main beam (37 of Council) and said second frame half (233, 235 of Council) comprising a second main beam (31 of Council); wherein each of said first main beam (37 of Council) and said second main beam (31 of Council) is subjected to a substantially equal tensile load in a respective tensile region when press-on forces are applied to the workpiece, thereby providing for a substantially equal distribution of the press-on forces which are absorbed by the frame (38 of Council) via 50 C3 L40-50; a

first pressure cylinder 36 and a second pressure cylinder (36 of Avakov) coupled to said frame (38 of Council), at least one of said first pressure cylinder 36 of Avakov and said second pressure cylinder 36 of Avakov disposed on said cross bar (38 multiple beams of Council), wherein said first pressure cylinder (36 of Avakov) displaces said first chain carrier (32 of Avakov) relative to said frame (beams of 38 of Council) and said second pressure cylinder 36 of Avakov displaces said second chain carrier (46,44 of Avakov) relative to said frame (beams of 38 of Council); wherein a first frame half is disposed on a first side of the drawing plane and a second frame half on a second side of the drawing plane (Fig. 2 of Avakov), Council teaches the first frame half (side of 233a,235a) and the second frame half (233,235) are configured to be symmetrical in the region opposing the press-on forces (Fig. 2), at least one of the chain carriers (243,245P) being displaceable in a frame (31,37) absorbing the press-on forces between the tool chains (343,345P), the frame (31,37,38) comprising a first frame half (233a,235a) disposed on a first side of the drawing plane (of 30) and a second frame half (233,235) disposed on a second side of the drawing plane (of 30), wherein the first frame half (233a,235a) and the second frame half (233,235) are configured to be symmetrical in the region opposing the press-on forces (Claim 1). It would be obvious to one of ordinary skill to use multiple cylinders as taught by Avakov into the invention of Council to maintain the tensile forces during transport.

Claims 3 and 29, Council teaches the frame (31,37) carries the two chain carriers (243,245P).

Claims 4 and 30, Council teaches the frame (31,37) is standing on a base (23,25) or the floor (Fig. 1).

Claim 5, Council teaches first chain wheels (231,233) for guiding the first tool chain (243,245P) are disposed on the first chain carrier (Fig. 2).

Claim 6, Council teaches second chain wheels (231,233) for guiding a second tool chain (243,245O) are disposed on the second chain carrier (Fig. 2).

Claims 7,9,10, and 25, Council teaches neutralizing press-on forces within the frame (31,37) so that first press-on forces, which are applied to a first press-on plane side and teaches second press-on forces, which are applied to a second press-on plane side, are neutralizing each other within said frame (31,37) (C5 L50-55).

Claims 8 and 16, Council teaches neutralizing press-on forces are configured to be symmetrical with respect to a drawing plane and/or with respect to a press-on plane (C5 L50-55).

Claims 13 and 14, Council teaches the caterpillar conveyor comprises a gantry that carries adjusting means (281) for at least one of the two chain carriers (Fig. 2), said adjusting means (281) being substantially disposed in the drawing plane (C5 L58-62).

Claim 17, Council teaches the frame (31,37) and a gantry for holding the adjusting means (283) for chain carriers are identical (Fig. 2).

Claim 18, Council teaches the two frame halves are joined together by means of connecting means (Fig. 1).

Claim 21, Council teaches the drawing die is disposed on the frame (31,37) with symmetrically formed supporting means (23,25) so that forces acting onto the drawing die are introduced substantially symmetrically into the two frame halves (Fig. 1).

Claim 26, Council teaches at least one chain carrier is aligned with respect to the linear workpiece, the at least one chain carrier being retained in the drawing plane by at least one adjusting means (281), and is moved and aligned in the drawing plane with respect to the linear workpiece to be drawn (C5 L58-62).

Claim 27, Council teaches a frame (31,37) or gantry opposes press-on forces needed for drawing the workpiece symmetrically with respect to the drawing plane (C3 L30-35).

Claim 28, Council teaches the frame or gantry (31,37) receives press-on forces between the tool chains (243,245P).

Claim 11,12,19,20,22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Council U.S. Patent No. 5,775,417 in view of Avakov U.S. Patent No. 5,094,340 in view of Haugwitz U.S. Patent No. 3,144,949.

Claims 11,12, and 19, Council teaches forces applied for drawing the workpiece are distributed between the frame halves (18a,18b), symmetrically with respect to the drawing plane, but Haugwitz teaches a force splitter (37',37'') by means of which press-on forces (C4 L20-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to use force splitter as taught by Haugwitz into the invention of Council in order to ease the tension on the workpiece.

Claims 20,22 and 23, Council teaches a connecting means for the first chain carrier (34) provided between the frame halves (18a,18b) and a connecting means for the second

chain carrier (48a) provided between the frame halves (18a,18b), but Haugwitz teaches the supporting means include at least one cross-tie (50) having a component departing from the drawing die and leading toward the frame (12), away from the drawing path. It would have been obvious to one of ordinary skill in the art at the time of the invention to use force splitter as taught by Haugwitz into the invention of Council in order to ease the tension on the workpiece.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Council U.S. Patent No. 5,775,417 in view of Avakov U.S. Patent No. 5,094,340 in view of Perrella U.S. Patent No. 4,360,054.

Claim 15, Council teaches the adjusting means (80a,80b) comprise at least one cylinder (90) for adjusting the chain carriers (34,44), but does not teach as Perrella teaches a hydraulic cylinder (410). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a hydraulic cylinder as taught by Perrella into the invention of Council in order to ensure the adjustment means will move without jamming.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Kavel P. Singh whose telephone number is (571) 272-2362. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/
Supervisory Patent Examiner, Art
Unit 3651

KPS